



Hull & Associates, Inc.  
3401 Glendale Avenue  
Suite 300  
Toledo, Ohio 43614  
(419) 385-2018  
Fax (419) 385-5487

EPA Region 5 Records Ctr.




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## MEMORANDUM

TO: Ralph Dollhopf, On-Scene Coordinator  
United States Environmental Protection Agency  
9311 Groh Road, Room 316  
Grosse Isle, Michigan 48138-1697

Deborah Orr, Remedial Project Manager  
United States Environmental Protection Agency  
77 W. Jackson Boulevard (SE-4J)  
Chicago, Illinois 60606-3590

FROM: Scott Lockhart, P.E.   
Project Manager

DATE: March 9, 1999

RE: Toledo Tie Treatment Site, Monthly Project Report  
KMC001.100.0050

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The following summary is prepared pursuant to Section V, Item 3.5, of the Unilateral Administrative Order (UAO) issued to Kerr McGee Chemical, LLC (KMC) on December 24, 1997.

### WORK PERIOD:

January 1, 1999 to January 31, 1999

### SIGNIFICANT DEVELOPMENTS:

1. Heavy snows during the first 12 days of January 1999 affected operations.
2. Additional seepage of suspected creosote into Williams Ditch was discovered during sediment removal activities.
3. Approximately 85 percent of excavation and 98 percent of sediment removal, based on projected volume, was completed in January.
4. Meeting with U. S. EPA on January 26, 1999 to discuss project status, engineering controls and management of stockpiles.
5. 10 additional exploratory test pits were excavated east of Williams Ditch and north of Frenchmens Road. These test pits were done to visually inspect subsurface conditions again to assist U.S. EPA in evaluating KMC's proposal to complete the removal action.
6. Follow up correspondence with the Ohio Department of Health regarding air sampling dated January 21, 1999.

**PROBLEMS:**

1. Heavy snows the first 12 days of January 1999 affected operations. Resolved by modifying operations to include snow removal, cold weather precautions, etc.
2. Additional seeps of suspected creosote were observed coming from the banks of Williams Ditch near the third bend east of Arco Drive. Additional material was removed from the banks in several locations to preliminarily assess limits of seepage. An additional test pit excavated south of Williams Ditch and soil borings along the north side of Williams Ditch using a Geoprobe™ were scheduled.

**ANALYTICAL DATA:**

1. Analytical data from the water treatment system are attached.

**CORRESPONDENCE:**

1. Monthly report dated January 11, 1999 for December 1998, activities was forwarded to US EPA.
2. Weekly reports from KMC to US EPA documenting site activities. Reports were dated January 7, 14, 22, and 28, 1999.
3. Correspondence to the Ohio Department of Health on January 21, 1999. Copies were sent to the U.S. EPA.
4. A Powerpoint presentation, in anticipation of the January 26, 1999, was forwarded to the U.S. EPA on January 25, 1999.

**ANTICIPATED ACTIVITIES NEXT PERIOD:**

1. Continued soil excavation and sediment removal from Williams Ditch.
2. Test pit and additional borings to assess seepage conditions along Williams Ditch.
3. Continued identification and evaluation of removal alternatives to address seepage.
4. Meeting with U.S. EPA to discuss project status.

ct: A. Keith Watson, Project Manager, Kerr-McGee  
W. O. Green III, Esq., Kerr-McGee  
Chris Schraff, Esq., Porter, Wright, Morris & Arthur  
Micheal McClary, Associate Regional Counsel  
Peter Goetz, Project Coordinator, Kerr-McGee  
Cedric Gibson, Ecology and Environment, Inc.

**Kerr-Mcgee Chemical, LLC  
Toledo Tie Treatment Site  
Time Critical Removal**

**Summary of Water Treatment System Chemicals of Concern Analytical Results**

ANALYTE NAME	METHOD	UNITS	OHIO EPA SURFACE WATER DISCHARGE STANDARD OUTSIDE MIXING ZONE MAXIMUM FOR WARMWATER HABITATS	KMC001-BKGD-101398-T348 COLLECTION DATE: 10/13/98 Williams Ditch Water Sample		KMC001-Influent 1-1110998-T340 COLLECTION DATE: 11/09/98 Influent Sample	
				RESULT	MDL	RESULT	MDL
pH	SM18-4500	Std.	6.5-9.0	7.19+	1	7.56	N/A
OIL & GREASE	EPA 1664	mg/L	10	392	5	126	5
PHOSPHORUS	SM18 4500B5E	mg/L	1*	4.79	0.04	0.96	0.04

**PRIORITY POLLUTANT VOLATILES**

BENZENE	EPA624/8240	ug/L	1100	500	40	110	40
ETHYLBENZENE	EPA624/8240	ug/L	1400	460	40	47	40
TOLUENE	EPA624/8240	ug/L	2400	950	40	120	40

**PRIORITY POLLUTANT BASE/NEUTRALS**

ACENAPHTHENE	EPA 625/8270	ug/L	67	600	150	260	26
FLUORANTHENE	EPA 625/8270	ug/L	200	970	150	540	26
NAPHTHALENE	EPA 625/8270	ug/L	160	7300	260	1500	220

\*\* Although the pH measured at the carbon filter was above the Ohio EPA Standard, the pH of both effluent pools did meet the standard. As a result, IT Group continued to monitor the pH of the effluent pools to insure that the pH of the discharge met the Ohio EPA Standard.

' Standard determined assuming an average water hardness of 200 mg/l.

+ pH result is based on laboratory measurements. Unless otherwise indicated, all other pH measurements were taken in the field.

Indicates exceedances of the Ohio EPA Standard

**Kerr-Mcgee Chemical, LLC**  
**Toledo Tie Treatment Site**  
**Time Critical Removal**

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ANALYTE NAME	METHOD	UNITS	OHIO EPA SURFACE WATER DISCHARGE STANDARD OUTSIDE MIXING ZONE MAXIMUM FOR WARMWATER HABITATS	KMC001-EFF1-102998-T348 COLLECTION DATE: 10/29/98 Batch Treatment Effluent Sample		KMC001-Effluent 2-110698-T340 COLLECTION DATE: 11/06/98 Continuous Discharge Effluent Sample	
				RESULT	MDL	RESULT	MDL
pH	SM18-4500	Std.	6.5-9.0	8.98+	1	7.76	N/A
OIL & GREASE	EPA 1664	mg/L	10	Not detect	5	Not detect	5
PHOSPHORUS	SM18 4500B5E	mg/L	1*	0.36	0.04	0.17	0.04

**PRIORITY POLLUTANT VOLATILES**

BENZENE	EPA624/8240	ug/L	1100	Not detect	1	Not detect	1
ETHYLBENZENE	EPA624/8240	ug/L	1400	Not detect	1	Not detect	1
TOLUENE	EPA624/8240	ug/L	2400	Not detect	1	Not detect	1

**PRIORITY POLLUTANT BASE/NEUTRALS**

ACENAPHTHENE	EPA 625/8270	ug/L	67	Not detect	3	3.8	3
FLUORANTHENE	EPA 625/8270	ug/L	200	Not detect	3	30	3
NAPHTHALENE	EPA 625/8270	ug/L	160	Not detect	6	Not detect	6

\*\* Although the pH measured at the carbon filter was above the Ohio EPA Standard, the pH of both effluent pools did meet the standard. As a result, IT Group continued to monitor the pH of the effluent pools to insure that the pH of the discharge met the Ohio EPA Standard.

\* Standard determined assuming an average water hardness of 200 mg/l.

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ANALYTE NAME	METHOD	UNITS	OHIO EPA SURFACE WATER DISCHARGE STANDARD OUTSIDE MIXING ZONE MAXIMUM FOR WARMWATER HABITATS	KMC001-Effluent 3-110998-T340 COLLECTION DATE: 11/09/98 Continuous Discharge Effluent Sample		KMC001-Effluent 4-120198-T340 COLLECTION DATE: 12/01/98 Continuous Discharge Effluent Sample	
				RESULT	MDL	RESULT	MDL
pH	SM18-4500	Std.	6.5-9.0	8.66	N/A	8.12	N/A
OIL & GREASE	EPA 1664	mg/L	10	Not detect	5	Not detect	5
PHOSPHORUS	SM18 4500B5E	mg/L	1*	0.23	0.04	0.37	0.04

**PRIORITY POLLUTANT VOLATILES**

BENZENE	EPA624/8240	ug/L	1100	Not detect	1	Not detect	1
ETHYLBENZENE	EPA624/8240	ug/L	1400	Not detect	1	Not detect	1
TOLUENE	EPA624/8240	ug/L	2400	Not detect	1	Not detect	1

**PRIORITY POLLUTANT BASE/NEUTRALS**

ACENAPHTHENE	EPA 625/8270	ug/L	67	Not detect	3	<2 (trace)	2
FLUORANTHENE	EPA 625/8270	ug/L	200	10	3	23	2
NAPHTHALENE	EPA 625/8270	ug/L	160	Not detect	6	Not detect	2

\*\* Although the pH measured at the carbon filter was above the Ohio EPA Standard, the pH of both effluent pools did meet the standard. As a result, IT Group continued to monitor the pH of the effluent pools to insure that the pH of the discharge met the Ohio EPA Standard.

' Standard determined assuming an average water hardness of 200 mg/l.

+ pH result is based on laboratory measurements. Unless otherwise indicated, all other pH measurements were taken in the field.

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ANALYTE NAME	METHOD	UNITS	OHIO EPA SURFACE WATER DISCHARGE STANDARD OUTSIDE MIXING ZONE MAXIMUM FOR WARMWATER HABITATS	KMC001-Effluent 5-121698-T400 COLLECTION DATE: 12/16/98 Continuous Discharge Effluent Sample		KMC001-Effluent6-122398-T400 COLLECTION DATE: 12/23/98 Continuous Discharge Effluent Sample	
				RESULT	MDL	RESULT	MDL
pH	SM18-4500	Std.	6.5-9.0	7.82	1	8.25	1
OIL & GREASE	EPA 1664	mg/L	10	Not detect	5	Not detect	5
PHOSPHORUS	SM18 4500B5E	mg/L	1*	0.24	0.04	0.16	0.04

**PRIORITY POLLUTANT VOLATILES**

BENZENE	EPA624/8240	ug/L	1100	Not detect	1	Not detect	1
ETHYLBENZENE	EPA624/8240	ug/L	1400	Not detect	1	Not detect	1
TOLUENE	EPA624/8240	ug/L	2400	Not detect	1	Not detect	1

**PRIORITY POLLUTANT BASE/NEUTRALS**

ACENAPHTHENE	EPA 625/8270	ug/L	67	44	3	12	9
FLUORANTHENE	EPA 625/8270	ug/L	200	180	7	61	9
NAPHTHALENE	EPA 625/8270	ug/L	160	Not detect	3	Not detect	9

\*\* Although the pH measured at the carbon filter was above the Ohio EPA Standard, the pH of both effluent pools did meet the standard. As a result, IT Group continued to monitor the pH of the effluent pools to insure that the pH of the discharge met the Ohio EPA Standard.

\* Standard determined assuming an average water hardness of 200 mg/l.

+ pH result is based on laboratory measurements. Unless otherwise indicated, all other pH measurements were taken in the field.

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ANALYTE NAME	METHOD	UNITS	OHIO EPA SURFACE WATER DISCHARGE STANDARD OUTSIDE MIXING ZONE MAXIMUM FOR WARMWATER HABITATS	KMC001-Effluent7-011899-T340 COLLECTION DATE: 1/18/99 Continuous Discharge Effluent Sample		KMC001-Effluent8-012599-T340 COLLECTION DATE: 1/25/99 Continuous Discharge Effluent Sample	
				RESULT	MDL	RESULT	MDL
pH	SM18-4500	Std.	6.5-9.0	9.02**	1	8.78	1
OIL & GREASE	EPA 1664	mg/L	10	Not detect	5	Not detect	5
PHOSPHORUS	SM18 4500B5E	mg/L	1*	0.33	0.04	0.14	0.04

**PRIORITY POLLUTANT VOLATILES**

BENZENE	EPA624/8240	ug/L	1100	Not detect	1	190	20
ETHYLBENZENE	EPA624/8240	ug/L	1400	Not detect	1	77	20
TOLUENE	EPA624/8240	ug/L	2400	Not detect	1	230	20

**PRIORITY POLLUTANT BASE/NEUTRALS**

ACENAPHTHENE	EPA 625/8270	ug/L	67	10	2	150	2
FLUORANTHENE	EPA 625/8270	ug/L	200	19	2	31	2
NAPHTHALENE	EPA 625/8270	ug/L	160	Not detect	2	1500	100

\*\* Although the pH measured at the carbon filter was above the Ohio EPA Standard, the pH of both effluent pools did meet the standard. As a result, IT Group continued to monitor the pH of the effluent pools to insure that the pH of the discharge met the Ohio EPA Standard.

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